

# BATTLE COMMAND ON THE MOVE

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## 1. INTRODUCTION

Modern combined arms conflicts demand an accelerated tempo of operations requiring the rapid processing and transfer of information to the relevant location on the battlefield. A means to gain timely and useful information quickly while on-the-move will enable the tactical commander to make informed decisions in a manner consistently faster than the enemy. The mission of Battle Command on the Move (BCOTM) systems is to provide the tactical commander with the same level of Situational Awareness (SA) enabling Situational Understanding (SU) at the decisive point on the battlefield. This allows his units to see first, understand first, act first and finish decisively. Designed for On-the-Move missions, BCOTM enables commander centric operations versus command post centric operations by bringing unprecedented SA and SU to the commander. Previously this type of information was only available in a fixed command post, far removed from the decisive point on the battlefield.

## 2. ARCHITECTURE

A suite of Army Battle Command System (ABCS) applications hosted on rugged computing hardware enable SA and SU in the BCOTM systems. The mobile ABCS applications are linked to other ABCS applications located in a fixed Tactical Operations Center (TOC) with terrestrial communications (e.g. Near Term Data Radio (NTDR) and Enhanced Position Location Reporting System (EPLRS)) and/or satellite communication (e.g. International Maritime Satellite (INMARSAT)). These links provide a live, continuous data flow which keeps the commander current on changing battlefield conditions.

## 3. IMPLEMENTATIONS

BCOTM has been implemented in five M-7 Bradley Fire Support Team (BFIST) vehicles (Fig 1), four of which moved into Iraq with the first convoy from the 4<sup>th</sup> Infantry Division (ID), Fort Hood, TX. The Bradley Command Vehicles (BCV) systems were surrounded by a security system of two Abrams tanks and an infantry squad in a Bradley Fighting Vehicle System to ensure safety. Major General Odierno successfully exercised

battle command from the untested BCV systems on the first combat operation undertaken by the 4<sup>th</sup> ID in over 30



Fig 1. BCOTM Bradley vehicle

years. The BCVs performed better than expected, was quick and easy to bring into action, and gave MG Odierno a decisive advantage during the 4<sup>th</sup> ID's engagements in Iraq. Without its presence the battle would have been delayed by about 9 hours. (Odierno and Erickson, 2003)

For the first time, commanders were given the ability to practice commander-centric warfare. The BCV systems allowed the commander to move forward to the decisive point on the Battlefield and engage in Network Centric Warfare. The success of the initial program



Fig 2. MBCOTM HMMWV vehicle

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resulted in a formal Army program for Mounted Battle Command on the Move (MBCOTM). The MBCOTM program adds two more variants to the MBCOTM family of systems an armored Highly Mobile Multipurpose Wheeled Vehicle (HMMWV) (Fig2) and a Stryker Command Variant (CV) (Fig3). The application of BCOTM into these versatile tactical vehicles, coupled



Fig. 3 MBCOTM Stryker vehicle

with the capability to integrate into Bradley Fighting Vehicle Systems, provides for widespread use in all types of Army units at the Brigade, Division and Corps echelons. The HMMWV also provides a potential solution as an intra-service tactical vehicle, providing a common platform to support joint service operations.

#### 4. JOINT OPERATIONS

Versions of the MBCOTM HMMWV and Stryker vehicles recently participated in a Joint Logistics-Over-the Shore exercise (JLOTS) at Fort Story, Virginia, hosted by the 7<sup>th</sup> Transportation Group. In addition to showcasing ability to load and off-load equipment onto a bare or degraded beach, joint and enroute mission planning was

demonstrated with the MBCOTM HMMWV and Stryker. The vehicles were loaded on the Theatre Support Vessel (TSV-1X) Spearhead. While ship-board enroute to Fort Story, both MBCOTM vehicles connected to the ship-board communications. Mission planning, collaboration, and Video Teleconferencing (VTC) were conducted through the TSV's C-Band satellite link to Fort Monmouth, New Jersey. This served to prove the flexibility of the BCOTM architecture and demonstrate the ability to maintain SA and SU even while in transit. Once off-loaded, the MBCOTM vehicles establish their own over-the-horizon communications links needed to complete the mission.

#### CONCLUSION

By providing Network Centric Operations (NCO) to the commander with information sharing and enhanced collaboration today, MBCOTM provides an interim solution to battle command for legacy and interim forces until the Future Combat System (FCS) equipped Unit of Action (UA) networked battle command system is fielded. It will provide a test bed for the development of the FCS-equipped UA and Objective Force battle command system and serve as an interface to legacy and interim forces until FCS fielding is complete.

#### REFERENCES

- Odierno, Major General Raymond T. and Lieutenant Colonel Edward J. Erickson., 2003: The Battle of Taji and Battle Command on the Move, *Military Review*, July-August, 2 – 8.